



JCAS CoE: Training the Way We Fight

Full-spectrum dominance in today's Era of Persistent Conflict is achieved only by operating as a joint force. A joint approach generates the ability to conduct offensive, defensive and stability operations and employ lethal and nonlethal capabilities in the air, on land and at sea; plus simultaneously allows integration of information operations and cyberspace. To generate this joint capability, we must train the way we fight—as a joint force.

Today's military has numerous training centers focused on joint Warfighter training. Three prominent centers immediately come to mind when thinking of joint fires training: National Training Center at Fort Irwin, California, the Joint Readiness Training Center at Fort Polk, Louisiana, and the Air Warfare Center at Nellis Air Force Base (AFB), Nevada.

By COL Billy F. Sprayberry, FA,
and LtCol Alan L. Shafer, USAF

While home-station training is focused primarily on individual service mission essential tasks, organizations do discuss the joint fight and eagerly await the opportunity for a training rotation at a training center where joint operations and assets can be applied. When fighting a war, however, those joint training opportunities occur all too infrequently. After those training opportunities are completed and after-action reports compiled, we gather lessons learned and return to home station to train at the service level again. While we clearly provide our Warfighters excellent joint training, there may be more options.

This KC-135 is aerial refueling an F-15E over the southwest US. Combining aerial refueling taught at Altus Air Force Base, Oklahoma, and Air Force (AF) fighters supporting the Joint Fires Observer Course at the Fires Center of Excellence, Fort Sill, Oklahoma, doubles the training for each at no additional cost. (Photo courtesy of USAF)

Is excellent joint Warfighter training the same as training excellent joint Warfighters? Our current joint force training model is to bring service Warfighters together for a relatively short period of time while trying to build this joint team in the field. While this adds value, does it train and develop exceptional joint Warfighters? Do these few days teach us about each other's culture or increase our understanding of joint warfare? Do these few precious days teach us the best ways to use each others' strengths, address any weaknesses, and teach how to blend into a joint force?

Joint Training. Joint Warfighter training focuses on the service units blending into a team for a training event for a short period of time, while training joint Warfighters should be a life-long endeavor. Each Service strives to teach and train as a joint force from cradle to grave. Each Service pursues every opportunity to "train the way we fight," for every training event throughout a career.

This is not advocating a reversal of the unique Service roles and responsibilities, but rather it is recognizing that specifically the Army and Air Force (USAF) missions, although different, are connected. According to General Norton Schwartz, Chief of Staff, US Air Force (CSAF), "Enhance AF support to joint operations with a specific emphasis on air-ground integration and ISR [intelligence, surveillance and reconnaissance] ... exquisite support of joint partners does not diminish us ... organize in a way that promotes trust and builds lasting professional relationships" (See "DoD Buzz" *Online Defense and Acquisition Journal*, dated 13 August 2008).

It is practicing jointness until it's natural. Both Services should commit to produce a joint endeavor to create joint Warfighters at every opportunity. While committed to building a framework for the development of joint Warfighters, the Fires Center of Excellence (CoE), Fort Sill, Oklahoma, has embarked on a Joint Fires University vision that seeks to make this a reality.

While a Joint Fires University is a vision for life-long education, the Services

need to begin with a change in how we conduct the business of training. While both Services seek training venues where Soldiers and Airmen can train as a joint team, they have a paucity of opportunities. However, leveraging existing installations' capabilities to support expanded joint training opportunities is not only possible, but necessary; and both Services should exploit at every opportunity.

Joint force operational requirements today clearly demonstrate we should train more often as a joint force. Unfortunately, not every Army post or Air Force base has its sister service stationed in such a way to facilitate this training. But there is the potential for a Joint Force Training Center dedicated to producing joint Warfighters in southwest Oklahoma and north Texas.

The Fires CoE at Fort Sill, the 80th Flying Training Wing at Sheppard AFB, Texas, and 97th Airlift Wing at Altus AFB, Oklahoma, are uniquely located to create a "triangle" of organizations to aid each other in their current training missions and to begin creating joint training venues that would enhance their own unique training and create durable, available joint training opportunities.

This proposal to work more closely among these facilities is a step beyond the current agreements the three installations have in effect today. The three installations and two Services have signed two Letters of Agreement (LOAs) that are in effect and two Inter-Service Support Agreements (ISSAs). There are three more pending agreements being negotiated and awaiting the final disposition of the Army Radar Approach Control (ARAC) at Fort Sill.

These agreements focus on service training and provide the framework for the individual installations to work their own training requirements with limited usage of each other's capabilities. These agreements only scratch the surface of the potential that can be realized. By looking at each other's training requirements and seeking those joint training opportunities, mutually supported joint training could be realized with little to no requirement for any increase in resources. Developing an overarching LOA that incorporates current existing LOAs and ISSAs would provide the framework for creating the joint training opportunities to support the installations' missions.

Joint Close Air Support (JCAS) CoE. The potential to expand this core triangle out to a "circle" of installations within range to conduct daily training

of the initial triangle agreement creates significant joint training opportunities. Coupling Tinker AFB's organic Airborne Warning and Control System (AWACS) aircraft's ability to provide command and control with Fort Sill's organic air defense systems enables nearly every aspect of the Theater Air Control System (TACS) and Army Air-Ground System (AAGS) at one location for joint training every day. A list of installations in close proximity to Fort Sill that would reap joint and total force benefits from a JCAS CoE joint training center are listed in the figure.

Key to this training opportunity is 2,000 square miles of airspace under one common operating picture (COP) within the joint training triad of Altus AFB, Sheppard AFB and Fort Sill. Adding the collective ranges, airspace and airfields will create a user-friendly training environment with such a diverse scope of capabilities that it easily will become the most desired training center available to our joint forces. The concept of a JCAS CoE could be developed with minimal impact to the individual installation missions and, in fact, would enhance each facility's training opportunities. This joint training triad will foster "training the way we

fight—as a joint force" and support the joint operational concepts expressed in the National Military Strategy.

Benefits. Immediate benefits would be reaped by the three installations and their current training missions. As an example, allowing F-16s from the Oklahoma Air National Guard (OKANG) to land at Altus AFB after their first sorties above the ranges of Fort Sill to refuel and arm with live weapons derives the following multiple benefits.

First, the OKANG aircraft flying from Altus is allowed to drop live weapons—something it is prohibited from doing by Tulsa International Airport joint-use airfield restrictions. This is important as its home airfield restrictions make it very difficult for the unit to use its allocation of weapons for training and aircrew currencies.

Next, Altus AFB will benefit from the opportunity to air refuel these F-16s while the aircraft are working the ranges at Fort Sill. Currently, the tanker training at Altus AFB refuels nearly all C-17 aircraft that lie within its span of control. Refueling fighters presents a different set of issues for the tanker trainees and increases student training opportunities.

When the F-16s refuel during the sorties, the added fuel will increase their

Installation		Aircraft Type
Oklahoma:		
Tinker Air Force Base (AFB)	Airborne Warning and Control System, and Tankers	
Tulsa Oklahoma Air National Guard (OKANG)	Fighters	
Oklahoma City, OKANG	Tankers	
Vance AFB	Fighter Training	
Texas:		
Randolph AFB	Fighter Training	
Fort Worth Joint Reserve Base	AF, Marine and Navy Fighters and Tankers	
Dyess AFB	Bombers and Airlift	
Goodfellow AFB	Intelligence Training	
Arkansas:		
Little Rock AFB	Airlift Training	
Fort Smith, Arkansas ANG	Fighters	
Louisiana:		
Barksdale AFB	Bombers and Fighters	
New Mexico:		
Cannon AFB	Gunships	

Installations near Fort Sill would benefit from a "Joint Close Air Support Center of Excellence" Joint Training Center.

time above the Fort Sill ranges from 30 minutes to an hour. This is a 100 percent increase in training for the aircrew and for the joint fires observers (JFOs) or joint tactical air controllers (JTACs) training at Fort Sill. This turn-around capability could be used by aircraft from any service or coalition partner, active or total force, to increase the training for both aircrews and ground forces.

Increased Joint Training Availabilities. Fort Sill's ranges are recognized as an excellent location to work with JFOs and JTACs, especially in an urban environment. In fact, recent changes in USAF training requirements have led Randolph, Vance and Little Rock AFBs to seek opportunities to train at Fort Sill. There is an increasing need for joint training, especially to incorporate joint training in the daily training schedules. Creating a formal JCAS CoE at Fort Sill will fill an ever-increasing joint training requirement.

The 80th Flying Training Wing (FTW) at Sheppard AFB would continue its unfettered access to the local airfield to sustain the European-NATO Joint Jet Pilot Training mission, but access to airspace under a COP would allow training aircraft direct access to sub-airspace within the training complex. This would allow these aircraft a 30 percent increase in training vice the less direct routing caused by operating as three separate airspace owners. This COP would be available to every airspace user, increasing the quality *and* the quantity of training, making this airspace very attractive to all potential airspace users.

The 80th FTW's new requirement to provide CAS training to its graduates is filled by the current JTAC training at Fort Sill. Fort Sill fulfills this training need, but takes the additional step of creating opportunities for Army and Marine Field Artillery lieutenants and young AF fighter pilots to share some ground training opportunities and gain understanding of each other's missions and capabilities.

Further, the 93rd Air Ground Operations Wing wants to explore an Army course for its air liaison officers to gain further understanding of Army culture and methodology. The Joint Operational Fires and Effects Course (JOFEC) and Fire Support Coordinator (FSCOORD) Course are suited perfectly to this request. These are just some examples of taking service training to the next level to create joint warriors.

Anchoring this training complex are

the ranges of Fort Sill. The impact areas allow joint forces to apply joint doctrine, best practices from current conflicts, and tactics, techniques and procedures (TTP) to train synchronized fires with greater efficiency. The ranges allow any ground unit to "deploy" to a simulated area of operations bare base, such as Altus AFB; a forward operating base, such as Henry Post Army Airfield; or by airborne or air assault on a landing zone such as Frisco Ridge on Fort Sill; then organize and move to contact via 40-mile convoy from Altus AFB or land on top of the firing positions and apply live organic or joint fires.

Equally, an AF mission support group could "deploy" to the bare base of Henry Post Army Airfield on Fort Sill and organize a base defense plan using AF security forces with their organic JFOs providing base security. This is also the opportunity for the AF security forces to conduct heavy weapons and mortars training that they cannot conduct at home base. Concurrently, a "deployed" medical support group could set up a field hospital to create a triage, critical care and evacuation facility. Simultaneously, an element of the USAF Global Air Mobility Support System sets up a forward air transport supply point to move elements of a Stryker brigade combat team (SBCT) from Fort Lewis to this forward base to augment the AF security forces and prepare for combat operations.

A Documented Need. Now is the time to expand joint opportunities among the triad of units at Fort Sill, Altus AFB and Sheppard AFB. The War on Terrorism (WOT) has created the environment where joint training opportunities need to be developed to train the way we fight. Further, as US ground combat forces are reduced in Iraq, there will be a greater reliance on US air support to help the Iraqi military to fill this security vacuum.

Analysis of the Rand Corporation study of September 2008 sponsored by the Director of Operational Planning, Policy and Strategy, Headquarters, USAF (AF/

Joint Fires Observers (JFOs) (SFC Goppert, left) and Joint Tactical Air Controllers (JTACs) (SSgt Smith) work together with USAF fighters flying above Fort Sill. As the Army's Joint Close Air Support Center of Excellence (JCAS CoE), Fort Sill is working hard to increase the JFO production and helping to increase the production of JTACs by hosting the JTAC Qualification Course.

(Photo by MSG Lee A. Power, Joint and Combined Integration Directorate, Fires CoE)

A5X), entitled "US Air Support to Iraqi Army Units During and Following US Troop Withdrawals" reveals the need for joint training for which there is no current training location. This study reveals the need to provide the joint forces with the right facilities and training to support successful execution of this phase of the WOT.

JFOs and JTACs. JFOs and JTACs are the foundation of support needed for the future fight the Rand study envisions. The command and control of the forces will be by an air support operations center and an Army warfighting unit to provide the joint fires linkage. Fort Sill has Forces Command (FORSCOM) Fires and/or ADA brigades to provide this command and control linkage. Joint forces needed for the next phase of the WOT would have the unprecedented opportunity to train on the ground and in the air as a joint team on the ranges and airspace of this training center.

After-Action Reviews. Equally important is the opportunity to have face-to-face debriefs leading to better TTP before the units deploy to take on and defeat the enemy that likely will try to take advantage of our major ground forces withdrawal from Iraq. Face-to-face debriefs are critical to improving the skills of the aircrews and ground forces involved. Ground forces' participation in the event planning and the debrief of the aircrew gives both groups immediate feedback on strengths and weaknesses, leads to better and more focused training and improves our skills as joint warriors. Integrating our joint forces in daily training will produce better joint Warfighters.



Capabilities. The Air Force is fielding two new aircraft systems to support this phase of the fight; the MC-12 and the AT-X. The opportunity exists to base some of these assets at Altus AFB or Sheppard AFB, or possibly even stationing these assets with the OKANG at Fort Sill. Not only could these centrally located assets be in a position to support air operations squadrons across the central US, but they would be uniquely located to support the joint lethal and nonlethal training ongoing at the Fires CoE. Adding the elements from sister services to ongoing service-oriented training—with little or no adjustment of location and timing—will provide the opportunity to train joint Warfighters everyday.

Specialized Airspace Needs. There are emerging technologies that need specialized airspace to operate. Unmanned Aerial Systems (UAS) and Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS) are just two examples for which this new training center is uniquely suited to support. The 29,000 square miles of airspace would support the emerging technology, allow the joint forces daily training opportunities and develop the TTP to integrate these new assets into joint force operations.

Under an FAA agreement, UAS normally must be flown within restricted airspace or airspace under military control. The combined airspace of the triangle of installations would lead to wider use of UAS outside the restricted areas and increase its joint training development and capabilities. Combining the UAS ability to find, fix, track and target the potential adversary; the Army's JFO and the Air Force's JTAC ability to apply joint fires on the adversary; and fighter/bomber assets' dropping live ordnance on detected targets on the Fort Sill ranges—while simultaneously employing Army surface-to-surface and surface-to-air fires—creates an ideal joint-training environment. It enables the entire joint targeting and fires process in one training location to train the way we fight.

The Fires CoE and Fort Sill, Oklahoma State University Multispectral Laboratories (OSU-UML) and the 301st Fighter Wing (301st FW) are in negotiations, establishing a memorandum of agreement (MOA) to combine and promote capabilities of a joint regional UAS Test Center. OSU-UML will pursue the attraction of UAS projects and users with the goal of being a national resource for the

UAS community. Potential Test Center users will include federal, state, local and non-governmental entities.

OSU-UML will develop the Test Center and pursue customers with UAS capabilities and interests, focusing first on regional and then national partnerships. OSU-UML will coordinate all plans and operations with both Fort Sill and the 301st FW. This MOA stems from the increased role of UAS in the Department of Defense and the Department of Homeland Security. Testing and evaluation of UAS and associated technologies is critical to successful fielding and deploying of operational UAS. A need exists for an operational environment that consists of restricted air space.

Joint and Combined. These are just a few scenarios of the enhancements gained from creating the JCAS CoE joint training complex, benefiting not only Army and Air Force units, but other Services as well. Immediate impact would be felt by the Navy and Marines, as well as Canadian forces that use Fort Sill for their JTAC training. There are numerous opportunities for the core installations to incorporate joint training on a daily basis with no impacts to their individual training mission. Adding other geographically close installations increases the opportunities exponentially. Sharing resources and assets makes good sense to our installations and the joint community as a whole.

The Army-Air Force Warfighter Talks (AAFWFT) between the Chief of Staff of the Army and CSAF on 23 January 2008 and 10 February 2009 highlighted the need for routine joint training as we seek to streamline our ability to access and apply joint fires. The most recent talks also identified the need to exploit the experimentation capabilities of our battle labs using exercises like Earth, Wind and Fire, and Omni Fusion. The JCAS CoE can fill needs that were highlighted during these talks.

Interdependent training requirements; integration of live, virtual and constructive training capability; joint airborne and airdrop training; and joint lessons learned from current operations are tasks easily adapted into daily training. Units from Altus AFB, Fort Sill and Sheppard AFB can preserve the mission capabilities they have and enhance them to meet these needs of the future force.

Irregular Warfare, Joint UAS and Army operational command post training currently are not part of the installation's core missions, but the airspace and

existing joint courses taught at Fort Sill (JFO, JTAC, JOFEC, FSCOORD and unit-level Electronic Warfare courses) are a superb foundation for adding value to both the organic courses and the development of these joint capabilities.

The foundation of jointness is the strength of individual service competencies pulled together. Our objective in implementing the Army's JCAS CoE is the optimal integration of all joint forces uniquely postured in southwest Oklahoma and north Texas. To achieve that goal, the interdependence of the Services requires mutual trust and reliance among all Warfighters and a significantly improved level of interoperability and joint fires.

This interdependence ultimately will result in a whole greater than the sum of its parts and will contribute to achieving full spectrum dominance through all forces acting in concert. The synergy gained through the interdependence of the Services makes it clear that jointness is more than interoperability. The joint force requires capabilities that are beyond the simple combination of service capabilities, and joint exercise and experimentation form the process by which those capabilities will be achieved.

Colonel Billy F. Sprayberry, Field Artillery (FA), is the Director, Joint and Combined Integration, Fires Center of Excellence, Fort Sill, Oklahoma. Previously, he was the Chief of Operational Fires and Effects, US Army Central (USARCENT), at Fort McPherson, Georgia, and Camp Arifjan, Kuwait. He has served as the Corps Targeting Officer for NATO Rapid Deployable Corps-Italy, deploying in support of the International Security Assistance Force VIII; and Commander, 2nd Battalion, 4th Field Artillery, Fort Sill, deploying to Operation Iraqi Freedom (OIF) I. He is a graduate of the Air War College at Maxwell AFB, Alabama.

Lieutenant Colonel Alan L. Shafer is the Director of Operating Location-Sill, LeMay Center for Doctrine Development and Education and serves as the Air Liaison Officer (ALO) to the Fires Center of Excellence and Fort Sill. He is a Command Pilot with more than 2,800 hours in RF-4, F-15E and T-38 aircraft. He served as an ALO to the 2nd Infantry, 101st Airborne Division, Fort Campbell, Kentucky, and to the Third Republic of Korea Army. He has also served as the Director of Current Operations for Air Forces Central Command at Shaw Air Force Base, South Carolina.